PSYCHOLOGY CASE RECORD

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Diploma in Psychological Medicine Examination 2016

By

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CERTIFICATE

This is to certify that this Psychological Case Record is a bonafide record of work done by **Dr. Raviteja Innamuri** during the year 2014-2016. I also certify that this record is an independent work done by the candidate under my supervision.

Dr. Anju Kuruvilla
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CASE RECORD 1: Personality Assessment

Name	: Ms. SK
Age	: 20 years
Sex	: Female
Marital status	: Unmarried
Religion	: Hindu
Language	: Hindi
Education	: Bachelor of Commerce
Occupation	: Student
Socio-economic status	: Middle
Residence	: Semi Urban
Informant	: Ms SK, her brothers and parents

Presenting complaints

Fainting spells	- eight years duration
Altered behavior	- one month duration

History of presenting illness

Ms. SK developed fainting episodes 8 years ago when she was admitted for 3-4 days for evaluation and treatment with no consequences. She had a similar episode 3.5 years ago with semiology suggestive of focal with secondary generalization when she was diagnosed with Neurocysticercosis. After this there were no episodes until 1 month ago when they recurred with increased frequency after failure in love. The episodes were characterized by altered consciousness and abnormal behavior often resulting in fainting. The episodes occurred at different situations and during different times of the day, >15 episodes, duration ranged from <5mins to sometimes >1 hour and there was no history suggestive of aura, post episode confusion, urinary incontinence or injuries due to fall with 2 admissions in the emergency ward and 1 in the intensive care unit. There is impairment of self-care, biological functions and socio-academic functioning.

There was no history suggestive of psychosis, mood disorder, OCD, pervasive developmental disorder, conduct disorder, anxiety disorder or substance use. There was no history suggestive of first rank symptoms.

There was no history of expressing false belief with conviction.

There was no history of depressive syndrome or mania or hypomania.

There was no history of phobia or panic attacks.

There was no history of substance use.

Treatment history

She was treated at different centers and was on multiple medications including different anti-epileptic drugs including Valproate and Phenytoin for 3 years for Neurocysticercosis, 8 years ago. She was also treated for Tuberculosis with Anti- Tubercular Therapy for 1 year at the age of 8 years. There is also history of jaundice during the same age. She was also treated with Escitalopram and Clonazepam before her presentation to CMC.

Family history

She was the sixth of eight siblings. There is history suggestive of antisocial personality in her eldest brother and alcohol use in two of her elder brothers.

Developmental history

The antenatal period was supervised and uneventful. Delivery was full term normal vaginal, with no birth asphyxia or neonatal seizure. Postnatal period was uneventful. The developmental milestones were reported to be normal.

Educational history

She was pursuing Bachelors in Commerce. Her academic performance was reportedly above- average.

Sexual development

She had female gender identity and heterosexual orientation. She denied any high-risk sexual behavior. She reported of sexual abuse by her sisters' husbands.

Marital history

She was unmarried

Premorbid personality

She was described to be sensitive, stubborn, had attention seeking behavior but was reportedly well adjusted.

Physical examination

Her vitals were stable. BMI 15.6kg/m^2

Systemic examinations were within normal limits.

Mental status examination

She was thinly built, moderately nourished and moderately kempt. She maintained poor eye contact. Rapport was difficult to be established. There was restlessness. Her level of activity was increased. There were no abnormal involuntary movements. She was not very co-operative during initial interview. Her primary mental functions were normal. Attention and concentration could

be aroused and was sustained. She had good immediate, recent and remote memory. She was oriented to time, place and person.

Her speech was spontaneous, loud in intensity, normal tone, pitch, reaction time and speed, and relevant. Form and stream of thought were normal. No delusions or depressive ideas were elicited. There was no thought broadcast or thought control or thought insertion. There were no perceptual abnormalities. She denied any suicidal ideas. There were no obsessions or compulsions. Her intelligence was normal. She denied any awareness of her behavior during the episode but reported of fainting spells. Her judgment was impaired.

Provisional diagnosis

SEIZURE DISORDER

DISSOCIATIVE DISORDER- MIXED

Aim for psychometric tests

To identify and explore significant personality factors influencing the psychopathology

Tests administered

1. The International Personality Disorder Examination (IPDE)-ICD 10 Module
2. Sack's Sentence Completion Test
3. Thematic Apperception Test
4. Rorschach (inkblot) test

Behavioral observation

During the entire period of assessment, she was cooperative. She could comprehend the instructions and paid adequate attention. She appeared well motivated to persist on the task.

Rationale for the tests

1. The International Personality Disorder Examination (WHO)- The IPDE developed by Dr.Armand.B.Loranger and colleagues is a semi-structured clinical interview that provides a means of arriving at the diagnosis of major categories of personality disorders and of assessing personality traits in a

standardized and reliable way. It is unique in that it secures reliable information in different cultural settings.

2. Sacks Sentence Completion Test is a projective test developed by Dr Sacks and Dr Levy. It consists of 60 partially completed sentence to which respondent adds the endings. The respondent projects the attitudes towards a personal experience of life. It helps to elicit ideas of self-perception.

3. Thematic Apperception Test is a projective measure intended to evaluate a person's patterns of thought, attitudes, observational capacity, and emotional responses to ambiguous test materials. It elicits information about a person's view of the world and his attitudes toward the self and others.

4. Rorshach Ink Blot Test provides an understanding of structure of the personality, affectional needs and ego strength. It also indicates degree of psychopathology.

Test findings

During the initial assessment sessions she was found to be anxious however became more comfortable as the testing proceeded. She was cooperative for testing and her comprehension of test instructions was fair.

1. The International Personality Disorder Examination

In the IPDE, Ms SK's answers suggested that she has a lack of self image, to go to extremes in fear of rejection, getting into intense relationship that do not last, unstable mood and feeling of emptiness. They reveal a mixed picture with high inclination towards her having emotionally unstable personality (borderline type) traits. The responses were also suggestive of her having paranoid and anxious personality traits.

2. Sacks Sentence Completion Test

She showed highest conflict in the areas of emotional tie with father, heterosexual relationships and guilt feelings with regard to sexual desires; moderate amount of conflict in the areas of role of women, friends and acquaintances in her life, authority, fears about past and no conflict in the area of mother, responsibility towards her family, job and goals.

3. Thematic Apperception Test

Most of her stories were short and she identified herself with the main hero of the same gender. The stories are descriptive and are accounts of patient's own stories and activities of daily life. There is a repetitive theme of people being angry; with need for autonomy and achievement; conflict regarding sexual needs and relationships and these stories have an underlying similarity with her life stories. There was also a fear of rejection by loved ones. Her stories also indicated presses of dominance from her family members. The

desire to have a loving father was projected. In spite of repeated reminders by the therapist, the stories continued in the same pattern.

4. Rorschach test

The total number of responses is less than 14, which are not sufficient for quantitative scoring according to Exner method of scoring and hence cannot be commented upon. The raw data had few popular responses; a large proportion was responses were anatomical. She also showed dislike for the test leaving the interpretation inconclusive.

Conclusion

Personality questionnaire and projective tests were administered. Her personality was characterized by lack of self-image, disparity between need for achievement and necessary effort and resources from within. She had inability to resolve problems with regard to her sexual needs, was easily affected by feelings and emotionally less stable. She had emotional insecurity, adjustment difficulties, low frustration tolerance, and intense emotional reactivity to trivial issues and was submissive in interpersonal situations.

Management

She was admitted in view of progressively worsening symptoms. Neurology consultation was taken, MRI brain was advised which revealed a calcified granuloma in the Left Caudate region with no perilesional oedema or mass lesion, which did not account for the symptomatology. No anti-convulsants were advised as her EEG was normal and she was seizure free for the last 3 years.

Rapport was established with the patient and the family. Her family was allowed to ventilate and supported. Her family was psycho educated about the nature, course and prognosis of her illness. Secondary gains in terms of increased attention, immediate gratification with tangible rewards and task avoidance were identified and managed with behavioral strategies of differential rewarding by using ADL and behavioral charts. Dissociative model was given gradually to the patient and problem-solving techniques were taught.

Family dynamics, structure and communication patterns were explored and parents were made aware and empowered.

She was also seen to improve in the Occupational Therapy. Regular appointments on outpatient basis were scheduled after discharge from hospital.

CASE RECORD 2: Intelligence Assessment

Name : Ms. V

Age : 3years 6 months

Sex : Female

Informants : Parents

Reliability : Reliable and adequate

Presenting complaints

Delayed response to name call noticed at about 9 months

Poor eye contact noticed at about 12 months

Poor speech noticed at about 2 years

History of presenting complaints

Ms.V was born out of a non- consanguineous union, full-term, breech presentation; LSCS with birth weight of 3.4 kgs and cried immediately after birth. There were no perinatal complications. There is reported history of delay

in speech development with mild regression in her language skills. No history of seizures reported. Her motor milestones were age appropriate.

Her index visit at Nambikkai Nilayam (NN) was on Jan 19, 2015 when she presented with poor speech development, inconsistent eye contact and response to name calling, lateral gaze, motor stereotypies, inadequate socialization, specific interests along with behavioural problems.

After detailed evaluation and assessment a diagnosis of Mild Intellectual Disability along with Autism Spectrum Disorder was considered.

Past history

No past treatment elsewhere

Birth and development history

Prenatal: Planned pregnancy with nil significant history

Perinatal: Full-term, breech presentation; LSCS with birth weight of 3.4 kgs and cried immediately after birth.

Postnatal: She was adequately immunized for age

Motor milestones were age appropriate but social and speech were delayed.

There is reported history of delay in speech development with a vocabulary of nearly 90 words and mild regression in her language skills noted after vaccination with MMR.

Emotional development and temperament

Not attending school

Family history

There is no family history of any neuropsychiatric morbidity.

Physical examination

No pallor, icterus, cyanosis, lymphadenopathy, clubbing or oedema was evident. Vitals were stable. Systemic examination was within normal limits. No Neurocutaneous markers or any dysmorphic features were noted.

Mental status examination

Varshini was moderately built, well kempt, not very cooperative, poor eye contact and her response to name-calling was inconsistent. She also had poor interaction with age appropriate peer group and exhibited motor stereotypies.

Provisional diagnosis

Developmental Delay with Behavioural problems.

Autism Spectrum Disorder.

Aims of psychological testing

As her history was suggestive of delay in speech development along with mild regression in her language skills.

Tests administered

1) Gessell's developmental schedule
2) Vineland Social Maturity Scale

Rationale for the test

1. Gessell's developmental schedule

The Gesell Developmental Schedules was also known as GDS, the Gesell Maturity Scale. The purpose of the original scale, was to measure the development of infants and young children from 4 weeks to 6 years. It evaluates the functions in five major domains like adaptive, gross motor, fine motor, language, personal and social.

2. Vineland Social Maturity Scale

Vineland's Social Maturity Scale measures social competence, self-help skills, and adaptive behaviour from infancy to adulthood. Personal and social skills are evaluated in the following areas: daily living skills (general self-help, eating, dressing); communication (listening, speaking, writing); motor skills

(fine and gross, including locomotion); socialization (interpersonal relationships, play and leisure, and coping skills); occupational skills; and self-direction. Raw scores are converted to an age equivalent score (expressed as social age) and a social quotient.

Behavioural observations

Ms.V was not co-operative during the test. Her attention could be aroused and sustained with difficulty and was kept engaged with positive reinforcements for the completion of the test.

Test findings

1) Gessell's developmental schedule:

   On Gessell's developmental schedule, she scored a DQ of 49 (moderate developmental delay) with a developmental age 22 months.

   Adaptive- 24 months

   Gross motor- 30 months

   Fine motor- 24 months

   Language- 24 months

   Personal & social- scattered from 12- 18 months

2) Vineland Social Maturity Scale:

   Psychological assessment was done on Vineland social maturity scale that had an age is equivalent of 1.95 years under the following domains:

Self help general- 1.43 years

Self help dressing- 2.05 years

Self help eating- 1.85 years

Communication-1.70 years

Self direction- Not yet developed

Socialization- 1.50 years

Locomotion-1.75 years

Occupation- 2.03 years

Impression

The tests revealed that Ms. V had moderate developmental delay with behavioural problems, and autism spectrum disorder

Treatment and advice:

1. Liaison with the department of Paediatric Neurology for etiological work- up, Ophthalmology and ENT review.
2. Pharmacologically, Syp. Risperidone 0.25ml HS OD was suggested in view of behavioural problems and stereotypies.
3. Regarding Moderate Developmental Delay with Behavioural problems goals were set to teach age appropriate self- care activities, improve her conceptual skills, facilitate age appropriate motor skills.

4. Regarding Autism Spectrum Disorder goals were set to promote attention, socialization, improve communication, reduce behaviour problems and facilitate appropriate play behaviour.
5. Family members were educated about her level of intellectual disability and its implications. They were also psycho- educated about various strategies for training. They were allowed to ventilate and support was provided. Their doubts were clarified.
6. The need for scaling down high expectations and to have more realistic expectations was discussed with the caregivers.
7. To continue self care training and concept training, social and communication skills training with regular follow- ups for assessment.

CASE RECORD 3: Diagnostic Clarification

Name	: Mr. K
Age	: 24 years
Sex	: Male
Marital status	: Unmarried
Religion	: Hindu
Language	: Telugu
Education	: MBBS 2nd year
Occupation	: Student
Socio-economic status	: Upper Middle
Residence	: Urban
Informant	: Mr K and his mother

Presenting complaints

Preoccupation with contamination - Four years

Fear of harm and not saying the right thing since - Four years

Muttering to self - Two years

History of presenting illness

Mr K presented with a chronic illness of nearly four years duration, consisting of fear of contamination that his hands were dirty and intrusive thoughts about fear of not doing or saying the right thing or things were not just in the right place. These thoughts were repetitive and caused significant anxiety to him. To control his anxiety, he began to engage in ritualistic behaviour such as spending nearly an hour bathing, washing hands repeatedly, arranging items on his desk and shoes in the rack repeatedly, checking if he has locked his room repeatedly, rewriting notes in class and performing mental rituals of repeating 'relax' thrice to relieve his anxiety and repeating to self that he has not done anything wrong. He reported spending nearly eight hours every day on these rituals, which interfered his work significantly and caused much distress. Although he knew that these thoughts and behaviours were irrational and he made attempts to control them, he was unable to leading to more anxiety. These symptoms worsened during stressful situations such as examinations and so on. Over the last two years, his mother reported to observing Mr. K become increasingly withdrawn and muttering to self. He would sit by himself and appear preoccupied and his interaction with his family members decline markedly. He also reported of strange beliefs that his knowledge could be transferred to others just by touching his palms. However, he did not hold with conviction. He reported of occasional disturbances in sleep

and appetite. He continued to attend his classes but he had recently failed his final exams.

There was no history suggestive of organicity or seizures.

There was no history of substance use.

There was no history of any abnormal perception.

There was no history of depressive syndrome or mania or hypomania.

There was no history of phobia or panic attacks.

There was no history of conduct disorder or pervasive developmental disorder.

Treatment history

He was treated for the above symptoms two years ago with Tab Escitalopram up to 10mg/ day. There was significant improvement with the medication but he subsequently stopped medicines on feeling better.

Family history

He was the younger of two children. There is history of a psychotic illness in his elder sister who has been on antipsychotic medication in the past and is currently off medication. His father is reported to be on anti- depressants for unspecified anxiety disorder.

Developmental history

The antenatal period was supervised and uneventful. He was born full term through caesarean section with no birth asphyxia or neonatal seizure. His postnatal period was uneventful. His developmental milestones were reported to be normal. There is history of tics during childhood, which spontaneously resolved. There is no history suggestive of recurrent Streptococcal throat infection.

Educational history

He is currently pursuing his bachelor' degree in medicine and is in the second year. His academic performance was reportedly declining with four backlogs. He had limited interaction with his peers and teachers.

Sexual History

He had male gender identity and heterosexual orientation. There was no masturbatory guilt. He denied any high-risk sexual behaviour.

Marital history

He was unmarried

Premorbid personality

He was reserved and shy and had limited social interaction. He was described as being calm with only few friends and no intimate relationships. He had good moral standards.

Physical examination

His vitals were stable. Systemic examinations were within normal limits. He was thin built with BMI of 22.3

Mental status examination

He was thin built and moderately nourished. He was moderately kempt with fleeting eye contact. Rapport could be established easily. He was alert and lucid. He was able to comprehend instructions well. He was cooperative towards the examiner. There were no abnormal motor movements. His speech was hesitant with normal reaction time, speed and was relevant. He appeared dysphoric. His affect was restricted; appropriate to the situation and congruent with his mood. He denied no suicidal ideas. His content of thought revealed aggressive and contamination obsessions as well as strange ideas. He denied delusions. Checking and repeating rituals were noted. No thought alienation

phenomena or perceptual abnormalities were present. He was oriented to time, place and person. His attention could be aroused but was difficult to sustain. His memory was intact. His intelligence was average. His insight into his illness was partial. Personal judgement was impaired with intact social and test judgment.

Provisional diagnosis

Obsessive Compulsive Disorder – mixed obsessional thoughts and acts

Prodrome of Schizophrenia

Aim for psychometry

To clarify symptomatology, psychopathology and diagnosis

Tests administered

1. Y- BOCS scale and symptom checklist
2. Sacks Sentence Completion Test
3. Thematic Apperception Test

Behavioural observation

During the entire exercise, he was cooperative. He could comprehend the instructions and paid adequate attention. He appeared well motivated.

Rationale and Findings

The Yale–Brown Obsessive Compulsive Scale and symptom check- list

The Yale–Brown Obsessive Compulsive Scale [Y-BOCS] is a test to rate the severity of obsessive–compulsive disorder (OCD) symptoms designed by Wayne K. Goodman and his colleagues. This scale, which measures obsessions separately from compulsions, specifically measures the severity of symptoms of obsessive–compulsive disorder without being biased towards the type of content of obsessions or compulsions present.

Sacks Sentence Completion Test is a projective test developed by Dr Sacks and Dr Levy. It consists of 60 partially completed sentence to which respondent adds endings. The respondent projects the attitudes towards a personal experience of life. It helps to elicit ideas of self-perception.

Thematic Apperception Test is a projective measure intended to evaluate a person's patterns of thought, attitudes, observational capacity, and emotional

responses to ambiguous test materials. It elicits information about a person's view of the world and his attitudes toward the self and others.

Test findings

The Yale–Brown Obsessive Compulsive Scale and symptom check- list

The Yale–Brown Obsessive Compulsive symptom check- list revealed obsessions both in current and past predominantly aggressive of fear of blurting out insults and doing something else embarrassing along with miscellaneous obsessions of fear of not saying just the right thing and intrusive non- sense words, sounds or music. His compulsions were predominantly cleaning, checking and repetitive rituals of rereading or rewriting.

His total score on Y- BOCS scale was 12 on Obsession rating scale, 14 on Compulsion rating scale with a total of 26 suggestive of severe obsessions and compulsions.

Sack's sentence completion test:

He shows the highest conflict in the areas of relationship with his father accusing of being selfish and wanting his friendship. There was moderate amount of conflict in the areas of attitude towards women as he holds high ideals of them yet calling them irresponsible, attitude towards family, fears

regarding highly optimistic futures and his own abilities and guilt feelings about his past academic performances. There are no conflict in the areas of relationship with mother, colleagues at college, heterosexual relationships, and attitude towards people supervised or superiors at college.

He considers mothers usually being good yet his own mother thinks differently and doesn't understand him. He considers his father as a good man but wishes he would be closer like a friend. Though he showed conflict with his mother and father as individuals, he showed no conflict with family as a unit who are good and treat him well. He seems to respond primarily to impulses from the environment. His emotional reactions are usually controlled. His thinking was predominantly immature and fantastic with his responses wanting to be the greatest and most intellectual and a movie star considering his current career path choices and performance.

Thematic Apperception Test

On the TAT protocol, most of the stories were very brief but well structured. The recurrent themes were that of the hero performing poorly in academics and facing the consequences. Mostly male heroes have been identified whose prominent needs were need for achievement and approval (especially, of father). The environment in most of the stories has been perceived as difficult. The significant conflicts that surfaced were acceptance versus rejection. The

main anxieties were that of failure to achieve and of being rejected by father. The main defences used were projection and reaction formation. Projection of father onto male heroes facing conflicts with respect to extra- marital affair was also noted. Superego structure was found to be adequate. No formal thought disorder was noted in his descriptions. Overall in the TAT stories, the integration of ego was found to be adequate. However most stories ended in ambivalence.

Conclusion

The tests revealed his personality traits viz. sensitivity to stressors and obsessions. He was prone to exhibit maladaptive behavior under stressful situation. The environment was perceived threatening and insecure. Poor interpersonal relations can be due to both the cause and the effect of his psychopathology. The test results also point towards a psychotic psychopathology. A current working diagnosis of Obsessive Compulsive Disorder to watch for symptoms of Schizophrenia in view of atypical features was concluded.

Management

He was seen at voluntarily at the out patient department. His attendance at college did not permit an In patient stay and was followed up regularly. He was started on Cap Fluoxetine up to 40mg/ day.

Non-pharmacologically, rapport was established with the patient. His family was allowed to ventilate and was psycho educated about the nature of his illness, course, prognosis and need for long term treatment and regular follow up. Behavioural strategies of relaxation exercises, exposure and response prevention; Cognitive therapy using relabeling, reattribution, refocus and re-evaluate; and activity schedule were also employed. He was seen to significantly improve on regular out patient visits. His parents were advised to bring him early, if there were any early warning signs of schizophrenia. The plan was to gradually transfer the responsibility and allow maintenance therapy.

CASE RECORD 3: Diagnostic Clarification

Name : Master U M

Age : 16 years

Sex : Male

Religion : Hindu

Language : Bengali

Education : Class 10

Occupation : Student

Socio-economic status : Middle

Residence : Rural

Informant : Self and parents

Presenting complaints:

Not attending school and tuitions regularly - 1 year

Episodes of unresponsiveness - 6 months

History of presenting illness

Master UM was apparently maintaining well until last year, while in class 9, he began to miss school and tuitions at least 4 to 5 times in a month. He was found to be either roaming with friends or playing cricket while away from school. During the same time he also began to experiment with cigarettes, at least 1 cigarette every 2-3 days, which he did in the company of friends. He reports that he did not enjoy it, however succumbed to it, under peer pressure. He also reports lying to parents regarding attendance along with occasional stealing of small amounts of money to buy an ice cream or chocolate. There was gradual decline in his academic performance and he started scoring around 40% in class 9, when his parents discovered about his frequent absence from school. Consequently his father decided to admit him into a boarding school.

In January 2015, Master UM began boarding school and reports being the only new student in the class. The classmates reportedly isolated him, even during play hours, which led to feelings of loneliness; frequent crying spells, refusal to attend school and deteriorating performance in academics. In April 2015, he had several episodes of tingling/ pulling sensation over his right arm, radiating to shoulder and neck followed by unresponsiveness with no history suggestive of aura or up rolling of eyes or tongue bite or complete loss of consciousness or jerky movements of limbs or involuntary micturition or post event confusion.

In view of the above complaints, several Neurologists were consulted and he was put on anti- epileptic drugs with no improvement in frequency of episodes or severity of symptoms. On presenting to the department of Neurology at CMC Vellore, a seizure disorder was ruled out after extensive evaluation, tapering schedule of anti- epileptic drugs was advised and referred to Department of Child and Adolescent Psychiatry for further management.

There is no history suggestive of injury to head, vomiting or blurring of vision.

There is no history suggestive of hearing non- existent voices or suspiciousness or thoughts being inserted or withdrawn.

There is no history suggestive of pervasive low mood with guilt, suicidal ideas or loss of sleep and appetite.

There is no history suggestive of panic attacks or Obsessive-compulsive symptoms or phobias

There is no history suggestive of intellectual disability

There is no history suggestive of physical altercation or cruelty to animals or people/ setting fire or destroying property intentionally/ temper tantrums.

Physical examination

Pulse rate: 76/ min, BP: 112/74 mm hg. Systemic examination was within normal limits

Mental status examination:

Master UM was moderately built and nourished. He was well kempt. He was attentive and cooperative towards the examiner. He displayed normal adaptive movements with no abnormalities in motor function. His attention could be aroused and sustained. He was oriented to time place and person. His memory was intact. He showed confusions and substitutions in reading and writing. Speech was normal with normal tone, reaction time with no deviations. No formal thought disorder was noted. Content of thought revealed a need to get better in multiple domains of life especially academics. No perceptual abnormalities were noted. His mood was euthymic with normal affect. His intelligence was below average. His judgment was fair with partial insight into Illness.

Provisional Diagnosis:

Dissociative convulsions

To rule out underlying psychopathology- Anxiety Vs. Depressive disorder

Aim for psychological testing

- To rule out underlying anxiety or depression

- To identify and explore significant conflicts, stressors and personality factors influencing the psychopathology.

Tests administered and rationale

1. Children's Depression Rating Scale (CDRS) is a 16-item measure used to determine the severity of depression in children. Items are measured on 3-, 4-, 5-, and 6-point scales. The CDRS is derived from the Hamilton Rating Scale for Depression (HAM-D); a score of 15 on the CDRS is equivalent to a score of 0 on the HAM-D. Assessment information is based on parent, child and schoolteacher interviews.

2.Screen for Child Anxiety Related Disorders (SCARED) is a child and parent self-report instrument, which consists of 41 items and 5 factors and is used to screen for childhood anxiety disorders including general anxiety disorder, separation anxiety disorder, panic disorder, and social phobia. In addition, it assesses symptoms related to school phobias.

3. Revised Children's Manifest Anxiety Scale-2 is a brief self-report inventory measuring the level and nature of anxiety in 6- to 19-year-olds. The test is composed of 49 items covering the scales of physiological anxiety, worry, social anxiety, defensiveness and inconsistent responding index.

4. The Child Behaviour Checklist (CBCL) is a component in the Achenbach System of Empirically Based Assessment developed by Thomas M. Achenbach and is widely used method of identifying emotional and behavioural problems in children and adolescents. It is completed by the parents.

5. Youth Self-Report (YSR) is one of a family of screening tools for behavioral and emotional problems in children and adolescents and is completed by the child or the adolescent.

6. Sack's Sentence Completion Test is a projective test developed by Dr Sacks and Dr Levy. It consists of 60 partially completed sentence to which respondent adds the endings. The respondent projects the attitudes towards a personal experience of life. It helps to elicit ideas of self-perception.

7. Thematic Apperception Test is a projective measure intended to evaluate a person's patterns of thought, attitudes, observational capacity, and emotional responses to ambiguous test materials. It elicits information about a person's view of the world and his attitudes toward the self and others.

Behavioural observation

He was cooperative during the entire period of assessment. In the initial part of assessment sessions he was found to be anxious, however became more comfortable as the testing proceeded. He could comprehend the instructions and his attention was adequate. He appeared well motivated to persist on the task.

Test findings

1. Children's Depression Rating Scale (CDRS)

On the CDRS he had a raw score of 22 and a T score of 44, which was not suggestive of a depressive disorder.

2. Screen for Child Anxiety Related Disorders (SCARED)

On the scale, he showed significant anxiety in the area of social anxiety disorder (9).His score was at the cut off on the areas of panic disorder and

somatic symptoms (7). His overall score was (28) which signifies the presence of an anxiety disorder.

3 Revised Children's Manifest Anxiety Scale-2 On the RCMAS- 2, his scores were between the 50th and 60th percentile on the domains of defensiveness, physiological anxiety and social anxiety with social anxiety being relatively higher.

4. The Child Behaviour Checklist (CBCL) On the Child Behavior Checklist, his scores indicated anxiety, somatic, attention and conduct problems.

5. Youth Self-Report (YSR) On the Youth Self- Report, his scores indicated that he has interpersonal, somatic, anxiety, impulsivity and attention problems.

6. Sack's Sentence Completion Test

He shows significant conflict in the area of relationship with his mother and women in general. He considers mothers as being usually good, yet considers his mother to be different. He feels that she does not understand him. On the other hand he views his father as a good man but wishes he would be closer like a friend. Though he showed conflict with his mother and father as

individuals, he showed no conflict with family as a unit, who are good and treat him well.

He accepts friends who are very similar to him and finds difficulty in accommodating anyone different. His experience with peers at boarding school seems to have been negative and he has guilt a feeling about which he does not elaborate. He considers women as superficially beautiful but untrustworthy probably relating to his break up with his girl friend. There was an overall impression of significant interpersonal conflicts.

His attitude towards self and his abilities were superficially positive. He believes he has the ability to fight, achieve and be optimistic about the future however it is not backed with his actual skills. His thinking was predominantly immature, superficially optimistic such as wanting to be a singer with no prior participation, buy sports cars with no adequate consideration of responsibilities and needs. His emotional reactions were impulsive and not moderated by careful consideration of factual information. An inner motivation to compete or excel was absent. His responses were reflective of a low self esteem along with strong feelings of inadequacies. There were indications of fears and avoidance of stressful situations. Anxiety in the social sphere was evident.

7. Thematic Apperception Test

On the TAT protocol, most of Master UK's responses were brief. He tended to identify himself with the hero whose prominent needs were need for achievement (especially academics), approval (especially of parents and peers) and understanding (from his parents and peers). The recurrent theme was that of the hero facing difficulties (especially in the school environment) as he continued to remain sensitive to criticism with significant conflicts of acceptance versus rejection. His main anxieties were failure to achieve and rejection and dominance by his parents and peers. His main defenses were projection (reporting the hero to be sick) and reaction formation (regarding illness and death). Overall, the integration of the ego was found to be inadequate. The majority of his stories were based on similar themes. The outcome of his stories was a narrow escape from danger or succumbing to it without a way out.

Diagnosis

Dissociative convulsions

Anxiety disorder NOS

Management

Master UM was admitted for diagnostic clarification and further management in view of progressive worsening symptoms. Rapport was established with the patient and the family and a psychological formulation was made. Anti epileptic drugs were slowly tapered and stopped as advised by Neurology as EEG and brain imaging revealed normal study. Episodes of unresponsiveness continued to persist with decreased duration during the course of his stay.

Non-pharmacological strategies like offering ventilation, face saving measures for dissociative symptoms, self-esteem appraisal through occupational therapy, focusing on the resolution of conflict and structuring of activity schedule was done. Secondary gains in terms of increased attention, immediate gratification with tangible rewards and task avoidance were identified and managed with behavioral strategies of differential rewarding by using ADL and behavioral charts. His symptoms of anxiety were further addressed with relaxation techniques, and cognitive behavior therapy with recognizing cognitive errors and rationalizing of responses.

His family was allowed to ventilate and was psycho-educated about the nature, course and prognosis of his illness. Family dynamics, structure and

communication patterns were explored and family members were made aware and empowered. His insight was built during the later course of his stay with emphasis on coping skills and compliance.

CASE RECORD 5 – Neuropsychiatric assessment

Name : Mr.U K

Age : 55 years

Sex : Male

Marital status : Married

Religion : Hindu

Language : Tamil- Telugu

Education : Class 11

Occupation : Business man- Textiles

Socio-economic status : Upper

Residence : Urban- Coimbatore/ Tirupur

Informant : Mr.U K and his wife

Presenting complaints

Seizures since April 2013

Forgetfulness and behavioral changes since August 2013

Increased reactions to minor events since August 2013

History of presenting illness

Mr.U K was apparently doing well until August 7th 2013 when his relatives noticed that he had forgotten where he parks his bike in the house usually. He was also found to have forgotten his son's current class of study. He reportedly had difficulty in navigation. He also had difficulty in recollecting names of

distant relatives and to recollect remote events from past like deaths. Immediate memory was however intact. He also had increased emotions for even minor events and was crying and smiling for the same.

He also had one episode of seizure on April 11th 2013 involving the right upper limb and lower limb with up rolling of eyes. There was a brief loss of consciousness and he had reported that he was trying to chase a rat when the episode of seizure occurred. The second episode was on May 8th with clonic tonic movements of the right upper and lower limb and unrolling of eyes. There was loss of consciousness for 15 minutes and he had post- ictal drowsiness that lasted for 30 minutes. He was initiated on anti-epileptics and since then had only 1 episode of break- through seizures on the 3rd of July and no further episodes hence.

He had been having narrating episodes of having helped strangers on 3 occasions, which could not be verified by any of the witnesses.

Those were:
Claims to have stopped a bus about to hit a boy 2. Saved a baby who has fallen down below a train 3. Saved an old man with seizures on the right side of the body and supported him by taking necessary care and precautions.

The patient reported increasing disturbances in memory over the past 2 months where he reported of instances of forgetting routes in familiar places. Patient's informants reported that patient displayed an acute onset of significant retrograde and anterograde memory deficits in August 2013. Relatives also

reported that the patient exhibited significant and persistent changes in emotional behavior and greater impulsivity since 2013.They also reported that there has been gradual but progressive improvement in functions over the past 1 year, where he seems to have recovered around 75 % of his pre- morbid functioning self.

He did not have any involuntary micturition or defecation. He did not have difficulty in vision.

He did not have any difficulty combing hair, mixing food, climbing stairs or wearing chappal.

He did not have any difficulty in feeling hot or cold water or mosquito bites or touch of cloths.

He was still attending to office regularly. He is able to perform activities of daily living independently and his biological functions were reportedly normal.

There is no history suggestive of any frank first rank symptoms.

There is no history of any manic or hypomanic symptoms in the past.

There is no history of any melancholic features in the past.

There is no history of any obsessive-compulsive symptoms or panic symptoms in the past.

There is no history of any other specific personality traits.

There is no history of any sexual dysfunction.

The relatives have brought him for further evaluation.

Past history

He had no known of co-morbidities of diabetes mellitus, diabetic retinopathy, ischemic heart disease, alcoholic liver disease, bronchial asthma, pulmonary tuberculosis or dyslipidaemia.

He is a reformed smoker. He reports having smoked 1-2 Packs per year until 25 years of age for 7 years). He continues to occasionally consumes alcohol <180 ml/ month.

Family history

There is no family history of any neuro-psychiatric illness in his family.

Birth and development history

The antenatal period and was uneventful. The birth was at full term normal vaginal delivery. There was no birth asphyxia. The developmental milestones were attained appropriate to age and were reported to be normal.

Educational history

He has studied up to class 11. He was described to be average in academics. His relationship with his peers and his teachers was warm.

Occupational history

He was running cloth business and was successful in the same. However after the onset of current cognitive problems, his working partner has temporarily taken over the business.

Sexual history

He had heterosexual orientation. He denied any premarital high-risk sexual behaviour.

Marital history

He was married for 17 years and had 1 son.

Premorbid personality

He is described to be a loving, calm and sincere.

Physical examination

He was moderately built and nourished. His vitals were stable. Pulse rate: 90/minute, Blood pressure: 130/70 mm Hg. No pallor, icterus, cyanosis, clubbing or enlarged palpable lymph nodes. Systemic examination was within normal limits. There were no focal neurological deficits.

Central nervous system

Higher function – MMSE 29/30

Cranial nerves – No cranial nerve palsies

Motor system

Bulk - Normal bilaterally

Tone - Normal tone bilaterally

Power - Grade 5 power bilaterally

No involuntary movements

Sensory system

Crude touch, Pain, Temperature - Normal bilaterally

Light touch, Vibration and Joint position sense - Normal bilaterally

Reflexes

Superficial abdominal reflex - Present all four quadrants

	Biceps	Triceps	Supinator	Knee	Ankle
Right	+	+	+	++	+
Left	+	+	+	++	+

Plantar reflex - Flexor bilaterally

Cerebellar functions - No signs of cerebellar dysfunction

Gait – Normal

Meningeal signs - Absent

Skull and spine – Normal

Mental status examination

He is a moderately built individual and was adequately kempt. He was conscious and alert through out the course of the examination. He maintained eye contact. His attention could be aroused and sustained. He displayed no tics or mannerisms. He was motivated, co-operative and was able to easily comprehend all the questions and instructions put to him through out the course of the interview.

His psychomotor activity was within normal limits.

His speech was normal in tone, tempo and volume. His speech was spontaneous, coherent and relevant. Prosody was maintained.

His thought displayed no signs of Formal Thought Disorder. He displayed no disturbances in either stream or possession of his thought. His content of thought didn't revel any significant signs of Psychopathology.

His mood was predominantly euthymic, reactive, normal range and increased lability.

However, patient's informants report significant lability since August 2013. They report increased overfamiliarity with friends and family members, more expressive of both positive and negative emotions than pre- morbid self and lower threshold and disproportionately more intense expressions of anger.

His affect appeared congruent but inappropriate at times.

Patient reports no abnormal perceptual experiences.

His immediate and recent memory was intact with impaired remote memory.

His insight was poor with intact judgement.

Provisional diagnosis

Limbic Encephalitis

Organic Personality Change

Aims for neuropsychological testing

1. To find out the cognitive profile of Mr.U K

2. To relate the findings to clinical presentation

Tests Administered

- Addenbrooke Cognitive Examination III (ACE III)
- PGI Memory scale (PGIMS)
- Frontal Assessment Battery (FAB)
- NIMHANS Neuropsychological Battery for Adults (2004)

Rationale for the tests:

1. The Addenbrooke's Cognitive Examination-III (ACE) is a commonly used cognitive tests used in dementia clinics and in the assessment of other

neurological disorders. It provides a sensitive, reliable, secure and easy to administer clinical tool for assessment of cognition as part of the process of assessing for dementia. It includes five subdomains, which provide a cognitive score out of a maximum of 100.

2. PGI Memory scale (PGIMS) has been standardized for the Indian population. Verbal memory is assessed through the presentation of stimuli such as these that then must be recalled: words, digits, nonsense syllables and sentences.

3. The Frontal Assessment Battery (FAB) is a brief tool that can be used at the bedside or in a clinic setting to assist in discriminating between dementias with a frontal dysexecutive phenotype and Dementia of Alzheimer‟s Type (DAT). The FAB has validity in distinguishing Fronto-temporal type dementia from DAT in mildly demented patients (MMSE > 24). Total score is from a maximum of 18, higher scores indicating better performance.

4. The NIMHANS Neuropsychological Battery for Adults consists of 21 different neuropsychological subtests which were originally developed by different authors and standardized in the Indian population by Rao,

Subbakrishna, and Gopukumar (2004). This battery has been extensively used in researches on neuropsychological performances of a wide variety of groups including normal individuals and clinical populations, and hence has prooven validity and applicability. The different areas of functions covered in the test battery are: attention and concentration; motor speed; executive functions such as planning ability, category fluency, phonemic fluency, working memory, set shifting and response inhibition, verbal learning and memory; visual learning and memory; expressive and receptive speech; visuo-constructive ability; and focal signs.

Behavioral Observation:

He was initially cooperative for the assessment but had difficulty in sustaining his attention over the course of the assessment and hence the assessment had to be split into sessions. There was no active resistance in doing the assessment. He was able to comprehend the instructions well. His verbal communication was adequate. There was no performance anxiety observed.

Description Of Results:

On **Adenbrooke's cognitive examination revised (ACE- III)** the patient obtained the following scores:

1. Attention and Orientation

The patient was grossly oriented to time and well oriented to place. He made subtle errors while performing 100 - 7 serial subtraction test but adequate performance in a Spelling Reversal task while reciting days-of-the-week in reverse.

2. Memory

He displayed adequate learning but some difficulty in recall for simple verbal stimuli (as not able to improve it cues, and confabulated the could not recall). He also exhibited subtle difficulties in learning and poor recall for complex verbal stimuli. His recognition for the same subtly impaired (and involved some confabulation). His retrograde memory seemed largely intact but was characterized by frequent Para phasic errors

3. Fluency

The patient was able to produce a slightly greater number of responses in the Phenomic task as compared to the Category task. On both tasks the patient displayed high productivity although, he did produce perseverative responses in the Category task.

4. Language

The patient did not display any deficits in reading, comprehension, writing, repetition, naming or verbal comprehension. The patient did report of intermittent difficulties in spelling known words.

5. Visuo- spatial

The patient's visuo- perceptive abilities were intact. He exhibited grossly adequate ability in the construction of a complex 2D figure, a simple 3D figure, and in the construction of a clock- face with a particular time accurately represent.

PGI MEMORY SCALE (PGIMS)

The patient obtained the following scores on each of the subtests of the PGIMS. All scores are compared to norms established for the age range of 50 - 59 years with a minimum of 10 years of formal education:

I. Remote Memory=5 (Mean= 6.00, SD=0.00)

II. Recent Memory=4 (Mean=4.92, SD=0.29)

III. Mental Balance=7 (Mean=7.00, SD= 1.95)

IV. Attention & Concentration=9 (Mean= 9.33, SD= 2.01)

V. Delayed Verbal Retention =7 (Mean= 8.00, SD= 1.41)

VI. Immediate Retention =11 (Mean= 8.25, SD= 1.54)

VII. Verbal Retention for Similar Pairs= 5 (Mean= 4.42, SD= 0.90)

VIII. Verbal Retention for Dissimilar Pairs=14 (Mean= 11.08, SD= 3.50)

IX. Visual Retention =10 (Mean= 9.43, SD= 3.68)

X. Visual Recognition =8 (Mean= 8.83, SD= 1.40)

On the Delayed Verbal Retention sub test the patient exhibited subtle Confabulation.

FRONTAL ASSESSMENT BATTERY (FAB)

[Cut – off has a Sensitivity of 77% and Specificity of 87% in differentiating between Frontal Dysexecutive type of Dementia and DAT]

I. Conceptualization= 2

II. Mental Flexibility= 3

III. Motor Programming= 3

IV. Sensitivity to Interference= 0

V. Inhibitory Control= 3

VI. Environmental Autonomy= 3

NIMHANS NEUROPSYCHOLOGICAL BATTERY FOR ADULTS (2004)

[For reference: As a general rule, a quantitative cut- off of <= 15 % is used to categorize scores as being deficient to a level suggestive of functional neurological involvement]

All raw scores are compared to normative data derived from male individuals, between 51- 65 years of age, with a 12^{th}- grade- level exposure to formal education.

MENTAL SPEED

On the Digit Symbol Substitution Task, the patient recorded a total time of 450 seconds(3^{rd} – 5^{th} percentile). The patients' performance on this task may have been confounded by the interaction of the size of the test items with the patient's lack of corrected vision (he had lost his spectacles).

FOCUSED ATTENTION

On the Color Trails Test, the patient recorded a total time of 136 seconds (<3rd percentile) on Trial 1, and a total time of 306 secs (<3rd percentile) on Trial 2. The patient made 1 error on Trial 1 and 3 errors on Trail 2. As the test items were big the patient had a no difficulty in perceiving them.

SUSTAINED ATTENTION

On the Digit Vigilance Test the patient recorded a total time of 842 secs(5th – 8th percentile) with a total of 1 errors.

WORKING MEMORY

On the Verbal N- Back Test the patient obtained a total of 9 hits (25th – 95th percentile) with 1 error (42 percentile) at the 1- Back Level with a total of 3 hits (<5th percentile) and 8 errors 95th – 11th percentile) at the 2- Back level.

VERBAL LEARNING AND MEMORY

The patient obtained the following score on the Learning trials of the Authority- Verbal Learning Test (AVLT)

List A:

Trial 1 = 40- 50th percentile

Trial 2 = 10th percentile

Trial 3 = 10th percentile

Trial 4 = <5th percentile

Trial 5 = 10th – 20th percentile

Total = 5^{th} – 10^{th} percentile

List B: 10- 20^{th} percentile

The patient obtained the following scores on the Recall Trials of the AVLT:

Immediate Recall = 10^{th} percentile

Delayed Recall = 5^{th} percentile

Long Term Percent Retention = 5^{th} to 10^{th} percentile

On the recognition Trial of the AVLT the patient obtained the following scores:

Hits = 10^{th}-20^{th} percentile

Misses= 23^{rd} percentile

False Alarms= <3^{rd} percentile

Across all the trails the patient exhibited significant signs of rapid forgetting, confabulation and significant interference effects.

VISUAL LEARNING AND MEMORY

On the complex figure test, following scores were obtained on various trials:

Copy: 50^{th} to 60^{th} percentile

Immediate Recall: 80^{th} percentile

Delayed Recall: 70^{th} to 75^{th} percentile

APRAXIAS AND AGNOSIAS

On assessment the patient did not display significant signs of Ideational, Ideomotor, or Gaze Apraxia. He did not display any signs of significant defects

in Construction. He also did not exhibit any signs of Visual Agnoisa, Simultagnosia, Astereognosia, Finger Agnosia or Prosopagnosia.

SUMMARY OF CLINICAL FINDINGS

The patient presented with clinical history suggestive of acute deterioration in Cognitive Functioning and Behavior since August 2013. The deterioration involved both anterograde and retrograde memory disturbances, geographical disorientation, increased liability of affect and increased impulsivity. The patient's informants report of approximately 75 % improvement in severity of the symptoms. On interview the patient exhibited signs of lability of affect.

On screening the patient performance was indicative of probable impairments in Attention (Serial Subtraction), Memory (learning, recall and recognition with signs of rapid forgetting and confabulation), Fluency (category) and Language (paraphasias and reports of dyslexia).

On more detailed assessment, the patient obtained quantitatively deficient scores in the Remote Memory and Recent Memory subsets of PGIMS, and deficient scores on the focuses attention, working memory, verbal learning and verbal memory measures of the NIMHANS battery.

Across all tests, the patient exhibited significant and consistent qualitative signs of rapid forgetting and confabulation and impaired response inhibition.

CLINICAL IMPRESSION AND MANAGEMENT

Mr U K's present Neuropsychological profile is suggestive of significant functional Neurological involvement of the Orbitofrontal- Dorsolateral Prefrontal- Anterior Cingulate-Diencephalic- Parahippocampal- Hippocampal-Inferior Parietal Lobule Networks.

The profile would also suggest profile would also suggest predominant involvement of Left hemisphere networks.

The patient history of Neuropsychological changes would not be consistent with, and would therefore seem to rule out Neurodegenerative such as FTLD, Alzheimer's etc.

Mr. UK and his family were educated on the nature of illness and, about the assessment results. He was treated on in-patient basis with IV immunoglobulin and rationalization of medicines. He was also advised referral to psychiatry for more detailed examination and strategies for management of his behavioral symptoms, and also to Occupational Therapy for Cognitive Re- training. Re-assessment on follow up was advised in order to validate the results of the present assessment and monitor any changes